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EXAMINER

SMITH, JEFFREY S

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/662,332

Applicant(s)

INAGE ET AL.

Examiner

Jeffrey S. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Requirement For Information

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please state whether any search of prior art was performed. If a search was performed, please state the citation for each prior art collection searched. If any art retrieved from the search was considered material to demonstrating the knowledge of a person having ordinary skill in the art to the disclosed photo sticker vending machine and method, photo sticker and photo sticker unit, please provide the citation for each piece of art considered and a copy of the art.

For example, if a prior art search was performed by the Japanese patent office for any element of the claimed photo sticker vending machine and method, photo sticker and photo sticker unit, in this or any other application filed by applicant or the assignee, please provide the search results. Also, if the Japanese patent office rejected the claims of the corresponding Japanese patent application, please provide a copy of the Japanese rejection.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements of claims 1-18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

For example in claim 1, the "background providing means" does not correspond to any element shown in the drawings. The figures do show curtains that can be lowered and also show electronic backgrounds that can be selected, however, the language of this claim element is so disconnected with the features shown in the drawings that this element could be the curtains, it could be the electronic background, it could be both the curtains and the electronic background, or it could be something else. Furthermore, the "determining means," the "additional image element," and the "converting means" do not appear to correspond to any structural features shown in the

drawings. Also, the steps performed by the elements of this claim are not shown in the drawings.

As another example, the steps of claim 6 are not shown in the drawings.

As a third example, in claims 15 and 16 the "first and second time intervals," the "third image subject portion," the "fourth background portion," and the "fifth portion" are not shown in the drawings.

These examples are intended as guidance to applicant and not as an exhaustive list of the missing claim elements. Each claim element must be shown in the drawings or canceled from the claims.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities.

Paragraph 4 discusses element 21 of figure 1, which is not shown in figure 1.

Paragraph 5, "horizontally boundary" should be "horizontal boundary."

Paragraph 2 discusses element 4 of figure 2, which is not shown in figure 2.

Also, this paragraph discusses upper line 14-1 and line 14-2, but figure 2 shows element 14.

In paragraph 97, the text starting with "SELECT IMAGE" does not match the corresponding text in figure 12.

In paragraph 115, the text starting with "SELECT ONLY" does not match the text in figure 15.

In paragraph 117, "the CPU 151 accepts" should be "the CPU 151 receives" to be consistent with figure 11.

In paragraph 120, "three types of a sharpness correction: for obtaining" should be "three types of a sharpness correction: a sharp type for obtaining" to be consistent with figure 16.

In paragraph 135, the description of S86 is inconsistent with figure 18.

In paragraph 151 "FIG. 7" should be "FIG. 10."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 1, a person of ordinary skill in this art is unable to make and use a device that captures an image then provides a background after the image is captured. The specification discloses a background providing means that provides a background curtain before the image is taken. The specification does not disclose a background curtain that is provided after the image is taken. Similarly, the specification does not teach a person of ordinary skill to make and use a determining means that determines whether the captured image includes the provided background, because the background is not provided when the image is captured. Also, the disclosure does not teach a converting means that converts the periphery to include the additional element regardless of whether the additional element is included in the background.

In claim 6, when the image is captured before the background is provided, the captured image will never include the provided background at the periphery of the

captured image. Therefore the disclosure does not enable a person of ordinary skill to make and use the claimed providing a background. Also in claim 6, the converting step is inconsistent with the determining step, because if the provided background is determined to not be in the captured image, then the provided background cannot be converted. Therefore, these steps are not enabled by the specification.

In claim 7, "converting said periphery of said captured image as said background provided" is not disclosed in the specification and a person of ordinary skill in the art is unable to make and use this claim element.

In claims 7 and 8, "determining whether said captured image includes one of said background provided and a periphery" is not disclosed in the specification. A person of ordinary skill in this art is unable to make and use these elements, because the image is captured before the background is provided.

In claim 9, "an imaging apparatus ... being adapted to receive ... an input image of a first portion of said image subject and a second portion of said background apparatus" is not disclosed in the specification. The determining means for determining an additional image element is not disclosed.

In claim 15, the "imaging apparatus" is not disclosed. Also, the "third image subject portion" is not disclosed, and the "fourth background portion" is not disclosed. Also the determining means for determining an additional image element is not disclosed.

In claim 16, the "fifth portion" is not disclosed.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the image capturing means captures an image, then the background providing means provides a background, then the determining means determines whether the captured image includes the provided background. If the image is captured before the background is provided, then the captured image never includes the provided background. The functions performed by these elements are therefore unclear.

Also in claim 1, the determining means determines whether the captured image includes the background and an additional image element. Presumably, if the captured image includes an additional element, the additional element does not have to be added to the captured image by the converting means. Yet the converting means includes the additional element to the captured image regardless of whether the additional element is already included in the captured image. The functions performed by the determining means and the converting means are therefore unclear.

In claim 2, "provides multiple backgrounds having different colors and patterns" is unclear. This phrase means that multiple backgrounds are provided simultaneously. This phrase also means that each background has different colors and patterns, yet the specification does not support these meanings.

In claim 3, "the color ... corresponding to the backgrounds" means that the backgrounds are all the same color, which is inconsistent with the specification.

In claim 5, "the image capture means" should be "the image capturing means."

In claim 6, "said object" lacks antecedent basis. Also, when the image is captured before the background is provided, the captured image will never include the provided background at the periphery of the captured image. The word "product" should be "produce."

Also in claim 6, the converting step is inconsistent with the determining step, because if the provided background is determined to not be in the captured image, then the provided background cannot be converted.

In claim 7, "converting said periphery of said captured image as said background provided" has a meaning that is unclear.

In claims 7 and 8, the meaning of "determining whether said captured image includes one of said background provided and a periphery" is unclear. Every image has a periphery, and the image is captured before the background is provided. Therefore, the method will always determine that the captured image does not include the provided background, and that the image has a periphery.

In claim 9, "an imaging apparatus ... being adapted to receive ... an input image of a first portion of said image subject and a second portion of said background apparatus" is unclear. This could mean that the input image has a first portion and a second portion, where the first portion is an image of the image subject and the second portion is an image of the displayed background. This phrase literally means that the

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input image has a first portion which is the image subject, and a second portion which is the background apparatus. However, the background apparatus has no first portion, so it should not have a second portion. Furthermore, neither the background apparatus nor the image subject can physically be received by the imaging apparatus.

In claim 14, "said user comprises said image subject" is unclear.

In claim 15, the "imaging apparatus" is as unclear as that of claim 9. Also, the "third image subject portion" is unclear because there is no "second image subject portion. The "fourth background portion" is unclear because there is no "third background portion."

In claim 15, if the "additional image element" is optional, then this element is not positively included in the claim. In other words, any reference that does not include the additional image element reads on this limitation.

In claim 16, the "fifth portion" is unclear.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiki et al., Japanese application number 2000-265128 ("Shiki").

For claim 1, Shiki discloses image capturing means for capturing an image of an object (see camera 13 in figure 1); background providing means located behind said object for providing a background based on selection and control of a user (see background (B) in figure 6 that is selected by a user); determining means for determining whether said captured image includes said background provided by said background providing means and an additional image element (the method determines if the background and the additional element are included with the captured image); converting means for converting a periphery of said captured image to include said additional image element (the additional element can be added to the periphery of the captured image to produce a converted image, see paragraph 32); display control means for controlling a display of the image converted by the converting means (see panel 16); and printing means for printing the image converted by the converting means on a sticker sheet (see paragraph 25).

For claim 2, Shiki discloses the background providing means provides multiple backgrounds having different colors and patterns based on selection and control by the user (see paragraph 45 the background image selection screen is displayed to a user).

For claim 3, Shiki discloses memory means for storing the color and the patterns corresponding to the backgrounds provided by the background providing means (see memory devices in figure 3).

For claim 4, Shiki discloses adjusting means for adjusting a brightness of the image, wherein said converting means further converts said periphery based on the

brightness adjusted by said adjusting means (see brightness adjustment processing in paragraph 32).

For claim 5, Shiki discloses selecting means for selecting an image to be edited from a plurality of images captured by the image capture means; and editing means for editing the image to be edited, and wherein the determining means determines whether said background of said selected image is said background provided by the background providing means (see paragraphs 66 and 67 the user selects an image from several images and edits the image).

For claim 6, Shiki discloses capturing an image (see camera in figure 1); receiving a user selection (user selects a background shown in figure 6); providing a background behind said object based on user selection (the background is provided behind the object as shown in figure 8); determining whether said captured image includes said background at a periphery thereof (the method determines that the image (C) in figure 6 does not include the background at the periphery of the images of the two people); a converting step for converting a part of said background at said periphery to product a converted image (the background at the periphery of the images of the people is converted so that the images in figure 6 are converted as shown in figure 8 to produce a composite image); controlling a display of the converted image (the user edits the composite displayed on the panel 16); and printing the converted image on a sticker sheet (see paragraph 25 for example).

For claim 7, Shiki discloses capturing an object image (see camera in figure 1); providing a background of said object image based on a selection and control of a user

(see figure 6); determining whether said captured image includes one of said background provided and a periphery (the device determines that the captured image does not include the selected background, the device also determines that the captured image has a periphery or edge); a converting step for converting said periphery of said captured image as said background provided (the background is inserted around the periphery of the object image as shown in figure 8); a display control step for controlling a display of the image converted by the converting step (the user edits the converted image on the panel 16); and a printing step for printing the image converted by the converting step on a sticker sheet to produce said photo sticker (see paragraph 25).

For claim 15, Shiki discloses a background apparatus adapted to display a first background during a first time interval and a second background during a second time interval (the different backgrounds in figure 6 can be displayed at different times); a subject region adapted to receive an image subject during at least one of said first and second time intervals (the image display receives and displays an image subject); an imaging apparatus, said imaging apparatus being adapted to form an input image, said input image including a first image subject portion and a second background portion (the device combines the image subject with the background to form a composite image); determining means for determining an additional image element (the user can input scribble as an additional image element); converting means for converting said input image into an output image, said output image including a third image subject portion and a fourth background portion (the image can be converted to include third and fourth portions as shown in figure 8), said output image optionally including said

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additional image element (if the additional element is optional, then not having the additional element reads on this claim); display control means for controlling a display of said output image (the device includes an image display); and printing means for printing said output image on a sticker sheet (see paragraph 25).

For claims 16-18, Shiki discloses said additional image element is disposed within a fifth portion of said output image, the fifth portion of said output image comprises a peripheral portion of said output image, and said fourth background portion comprises said fifth portion (see figures 6 and 8).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiki in view of U.S. Patent Number 6,750,901 issued to Silverbrook ("Silverbrook").

For claim 8, Shiki discloses image capturing means for capturing an object image (see camera 13 in figure 1); background providing means located behind said object for providing a background based on selection and control of a user (see background (B) in figure 6 that is selected by a user); determining means for determining whether said captured image includes one of said background provided and a periphery (the device determines that the captured image does not include the selected background, the device also determines that the captured image has a periphery or edge); converting means for converting said periphery of said captured image (the background is inserted around the periphery of the object image as shown in figure 8); display control means for controlling a display of the image converted by the converting means (the user edits the converted image on the panel 16);

Shiki does not disclose wherein the photo sticker unit includes identification information storing means for storing identification information for identifying the photo sticker unit; and wherein the photo sticker unit is available when the photo sticker vending machine authenticates the identification information stored in the identification information storing means.

Silverbrook discloses a photo printing unit including identification information storing means for storing identification information for identifying the photo printing unit (see column 4 lines 40-47); and wherein the photo printing unit is available when the photo device authenticates the identification information stored in the identification information storing means (see column 4 lines 40-47).

It would have been obvious to one of ordinary skill in this art at the time of the invention to modify the photo sticker machine of Shiki to include the printer authentication device of Silverbrook for the benefit of allowing a user to print images from the printer without downloading or transferring the images to another computer as taught by Silverbrook at column 4 lines 11-18.

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiki in view of U.S. Patent Number 6,298,197 issued to Wain et al. ("Wain").

Shiki in figures 1 and 2 discloses a background apparatus, said background apparatus being adapted to display a background; a subject region, said subject region being adapted to receive an image subject during at least one of said first and second time intervals; an imaging apparatus, said imaging apparatus being adapted to receive, during at least one of said first and second time intervals, an input image of a first portion of said image subject and a second portion of said background apparatus; converting means for converting said input image into an output image, said output image including at least a portion of said input image; determining means for determining an optional image element, said optional image element being adapted to be included in said output image by said converting means; display control means for controlling a display of said output image; and printing means for printing said output image on a sticker sheet.

Shiki does not disclose a background apparatus adapted to display a first background during a first time interval and a second background during a second time interval.

Wain discloses a background apparatus adapted to display a first background during a first time interval and a second background during a second time interval (see column 3 lines 50-63).

It would have been obvious to one of ordinary skill in this art at the time of invention to include the background apparatus of Wain with the sticker device of Shiki for the benefit of allowing a user to select a background as taught by Wain at column 3 lines 59-62.

For claim 10, Shiki discloses that the imaging apparatus comprises a camera.

For claim 11, both Shiki and Wain disclose that the subject region is disposed between said imaging apparatus and said background apparatus.

For claim 12, Shiki discloses that the optional image element is included in a background region of said output image.

For claim 13, Wain discloses that the background apparatus is adapted to display said first and second backgrounds according to an input received from a user.

For claim 14, both Shiki and Wain disclose a user comprises said image subject.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Number 5,400,081 issued to Chaplin discloses a method for removing background defects as shown in figure 1.

U.S. Patent Number 5,577,179 issued to Blank shows a photo booth that changes the color of a periphery of an object to conform to the background color as discussed in the abstract.

U.S. Patent Number 6,011,595 issued to Henderson et al. expands a key color volume to include shadow regions in an image.

U.S. Patent Number 5,923,380 issued to Yang et al. discloses a photo booth that removes a non-uniform background from an image as discussed in col 4 lines 11-31.

U.S. Patent Number 6,343,147 issued to Yamamoto discloses a method of changing a color of a periphery of an image as shown in figures 3 and 4.

U.S. Patent Number 6,366,316 issued to Parulski et al. removes an arbitrary background from an image to create a composite image as shown in figure 1.

U.S. Patent Number 7,024,039 issued to Simard et al. extends a boundary region of an image as shown in figure 2.

U.S. Patent Number 6,771,834 issued to Martins et al. converts a background of an image to a single color as shown in figure 3.

U.S. Patent Number 6,807,296 issued to Mishima discloses a chromakey method that transforms a background color when producing a composite image.

U.S. Patent Number 6,661,918 issued to Gordon et al. converts the background of an image to a single color as shown in figure 4.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

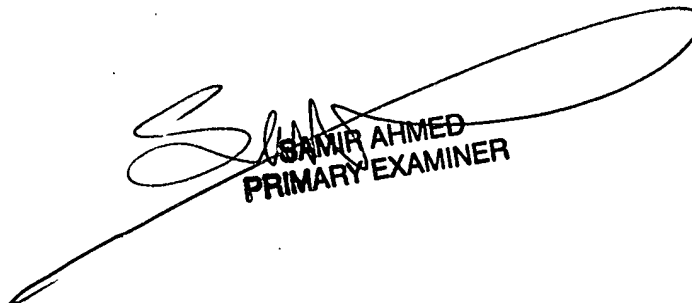
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS

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February 21, 2007.


SAMI AHMED
PRIMARY EXAMINER